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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,854	10/07/2002	Jiang Gu	0887-4151US1	5258
27123	7590	07/11/2006	EXAMINER	
MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			NGUYEN, HAU H	
			ART UNIT	PAPER NUMBER
			2628	

DATE MAILED: 07/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/089,854

**Applicant(s)**

GU ET AL.

**Examiner**

Hau H. Nguyen

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-58 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. The RCE filed on April 19, 2006 has been considered in preparing this Office Action.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 57 recites the limitation "said database". There is insufficient antecedent basis for this limitation in the claim.

#### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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5. Claims 1-34, 36-40, 42-53 are rejected under 35 U.S.C. 102(e) as being anticipated by Bacus et al. (U.S Patent No. 6,272,235).

Referring to claim 1, Bacus et al. teach a method creating, and transmitting over an intranet or via the Internet a virtual microscope slide comprising:

capturing a first image corresponding to an entire area of a specimen 21 with a digital image capturing device 14 (Figs. 9A and 9B, and col. 11, lines 1-15);

capturing at least one second image corresponding to a selected area of the first image, said second image having a higher magnification than the first image (Fig. 2, e.g. selected area 30 of the entire specimen 24 having higher magnification shown as item 26) (see col. 19, lines 38-53);

storing the first and second images in a computer-readable medium (col. 12, lines 18-45).

generating a linking information map indicating the relationship between said first and second images (col. 8, lines 47-59, and col. 6, line 64 to col. 7, line 15).

As per claim 2, as shown in Fig. 6, Bacus et al. teach said capturing of second image is performed a plurality of times on different selected areas of the specimen (Fig. 11, steps 209 a-c), and wherein the linking information map links the first image to each of the plurality of second images as cited above.

As per claim 3, as cited above with reference to Fig. 2, Bacus et al. teach choosing a desired area 30 of the first image 24 for obtaining a corresponding magnified second image 26 thereof after said generating of the linking information map cited above.

As per claim 4, Bacus et al. teach the linking information map facilitates the viewing of a desired area of the specimen by providing the appropriate second image linked to said desired area of the first image (see Abstract).

As per claims 5-7, Bacus et al. teach the first and second images are in similar format, such as .bmp (col. 12, lines 46-55).

As per claim 8, Bacus et al. further teach storing the information map in said computer-readable medium (such as storing in files FinalScan.ini and SlideScan.in., col. 12, lines 56-67).

As per claims 9 and 10, Bacus et al. also teach said computer-readable medium is one of computer hard drive, portable disk or CD, or a web server (col. 6, lines 42-56).

As per claim 11, as shown in Fig. 9, Bacus et al. teach the digital image capturing device is a digital camera 14.

As per claim 12, Bacus et al. also teach the digital image capturing device can be a scanner (col. 4, lines 18-24).

Claims 13-14, 17-20, 22-25, 43-46, 48, 49, and 52, which are similar in scope to claims 1-12, are thus rejected under the same rationale.

As per claims 15 and 16, Bacus et al. further teach posting the images and the information map to a network for allowing a remote user to access said images and said information map after said storing, and further including sending the images and the information map to a remote user via e-mail for allowing the remote user to access said images and said linking information map after said storing (col. 7, lines 51-57, and also, Fig. 17, col. 28, line 42 to col. 29, line 3).

Claim 21, which is similar in scope to claim 16, is thus rejected under the same rationale.

As per claim 26, Bacus et al. teach a virtual telemicroscope as cited above, comprising:

receiving from a user a location for an index file, said index file stored on a computer-readable medium (such as a file listing as shown in Fig. 7A);

retrieving said index file, said index file listing a plurality of image files, wherein each of said image file has an image of a specimen 21 and map information of linked images (indicated by the X and Y coordinates to display all the tiles contiguously, col. 12, lines 56-67);

displaying on the monitor screen of the user's computer system the listing of the plurality of image files from the index files (col. 19, lines 26-37);

receiving from the user a first file name comprising an image of the entire specimen (*such as SlideScan.ini, listing all the original bitmap files representing individual image tiles at 1.5X magnification*), wherein the first file name is linked to a second file name comprising an image of a selected area of the specimen, wherein said image of said second file name has higher magnification level than the image in said first file name (*such as FinalScan.ini, listing the X-Y coordinates of the high magnification image tiles scanned and stored, col. 14*); and

displaying dynamically the images of said first and second file name allowing a user to view the specimen with different magnification levels of the specimen (Figs. 2, 3, and 10).

As per claim 27, Bacus et al. teach the location of said index file is selected from a group consisting of an Internet URL, a path of intranet, and a local file (col. 19, lines 17-25).

As per claim 28, Bacus et al. also teach said displaying includes providing a tool bar on the monitor screen of the computer system for allowing a user to select different viewing and navigation options (such as providing a scroll bar, col. 28, lines 5-9).

As per claim 29, Bacus et al. further teach the tool bar provides a magnifying means to view the specimen (Fig. 13, overriding parameters).

As per claim 30, as cited above, Bacus et al. teach capturing and storing images at different levels of magnification (i.e. at 1.25X magnification for low resolution image, and 40X magnification for high resolution image, col. 12, lines 14-17). Therefore, the magnifying means magnifies the specimen between 1.5 and 5 times from the displayed image on the screen without losing resolution.

As per claim 31, Bacus et al. further teach said magnifying means comprises a movable virtual lens for allowing the user to adjust the magnification level and select the section of the specimen being magnified thereby dynamically displaying the magnified portion of the image on the entire screen (col. 26, lines 32-37).

As per claim 32, Bacus et al. also teach the movable virtual lens is a viewing window on a monitor of said computer system (as shown in Fig. 13).

Claims 33 and 34, which are similar in scope to claims 31 and 32, are thus rejected under the same rationale.

As per claims 36 and 37, as cited above, Bacus et al. teach a communication means for communicating between users, or via e-mail (col. 7, lines 51-57, and also, Fig. 17, col. 28, line 42 to col. 29, line 3).

As per claim 38, which is similar in scope to claims 13-16, are thus rejected under the same rationale.

As per claim 39, as cited above and as shown in Fig. 9, Bacus et al. teach the digital image capturing device is a digital camera 14.

As per claim 40, as also cited above, Bacus et al. further teach storing the information map in said computer-readable medium (such as storing in files FinalScan.ini and SlideScan.in., col. 12, lines 56-67).

As per claim 42, Bacus et al. teach the computer network is selected from a group consisting of an Internet, intranet, and local area network (Fig. 17).

Claims 47, 50, and 53, which are similar in scope to claim 26, are thus rejected under the same rationale.

Claim 51, which is similar in scope to claim 38, is thus rejected under the same rationale.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



7. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bacus et al. (U.S Patent No. 6,272,235).

As per claim 35, Bacus et al. meet limitations of claim 33, however, does not expressly teach the magnification capacity of said virtual objective lens is up to 200 from the original size of said specimen. It would have been obvious at the time of the invention to increase magnification capacity up to 200 because increasing magnification is a well-known feature.

8. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bacus et al. (U.S Patent No. 6,272,235) in view of Iwamura (U.S. Patent No. 6,560,339).

As per claim 41, as applied to claim 40, Bacus et al. teach all the limitations of claim 41, except for encrypting the images and linking map. However, it would have been obvious to one skilled in the art to do this because encrypting data before transmitting over a computer network is well known in the art so that only authorized user can access the data. One of the examples can be shown in Patent 6,560,339 to Iwamura.

9. Claims 54-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bacus et al. (U.S Patent No. 6,272,235) (hereinafter '235) in view of Bacus et al. (U.S. Patent No. 6,031,930) (hereinafter '930).

Referring to claim 54 and 55, as applied to claim 28, Bacus et al. '235 teach all the limitations of claims 54 and 55, and further teach the scaling measurement between

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the image with low magnification in unit of microns corresponding to the image with higher magnification in units of microns (col. 12, lines 13-17). Thus, Bacus et al. '235 teach all the limitations of claims 54 and 55, except for a tool bar providing a measurement function.

However, Bacus et al. '930 teach providing a measurement function enabling the user to directly measure the images on the monitor screen (Fig. 7), and enabling the user to calibrates a measuring unit by referring to a know distance of the specimen thereby ensuring an accurate reading of distances on the monitor screen at any magnifications of the original image (col. 12, lines 39-43, and col. 13, lines 6-9) (i.e. enabling calculating the area of a selected region in units square microns).

Therefore, it would have been obvious to one skilled in the art to utilize the method as taught by Patent '930 in combination with the method as taught by Patent '235 in order to enable the user more controls to analyze the specimen.

In regard to claims 56 and 57, as cited above, Bacus et al. '235 teach providing the user with an index file including plurality of image files that are linked together, and also teach the images are provided from a server so that a user can access the images via a computer network.

10. Claim 58 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bacus et al. (U.S Patent No. 6,272,235) (hereinafter '235) in view of Bacus et al. (U.S. Patent No. 6,031,930) (hereinafter '930), and further in view of Kamentsky et al. (US Patent No. 5,793,969).

Referring to claim 58, although '235 and '930 fail to teach the tool bar further provides a text data association function thereby allowing the user to associate the text data to the images for a future reference, Kamentsky et al., as cited in previous Office Action, discloses this feature (Fig. 3, item 25, col. 9, lines 8-24).

Therefore, it would have been obvious to one skilled in the art to utilize the method as taught by Patents '235 and '930 in combination with the method as taught by Kamentsky et al. in order to enable the user to record annotations for future use.

### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hau H. Nguyen whose telephone number is: 571-272-7787. The examiner can normally be reached on MON-FRI from 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794.

The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

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have questions on access to the Private PAIR system contact the Electronic Business Center (EBC) at 866-2 17-9197 (toll-free).

H. Nguyen

6/30/2006

A handwritten signature in black ink, appearing to be 'K. M. TUNG', with a long, sweeping horizontal stroke extending to the right.

KEE M. TUNG  
SUPERVISORY PATENT EXAMINER